OFFICIAL MEXICAN STANDARD
NOM-007-SCT2/1994
MARKING OF PACKAGES AND PACKAGINGS INTENDED FOR THE TRANSPORT OF HAZARDOUS SUBSTANCES AND WASTES.

1.- PURPOSE.

The purpose of this Official Mexican Standard is to set forth the characteristics and specifications that must be complied with for the marking of packages and packagings intended for the Land Transport of Hazardous Substances and Wastes.

2.- APPLICABILITY.

This Official Mexican Standard applies compulsorily to the shippers, carriers and consignees of hazardous substances and wastes, as well as the manufacturers of packages and packagings, and those responsible for the construction and reconstruction of packages and packagings used for the transport of hazardous substances, materials and wastes.

This Official Mexican Standard does not apply to:

a) Packages and packagings intended to contain Class 7 materials, radioactive materials or their wastes, which shall be subject to the Standards issued by the Secretariat of Energy, Mining and Semipublic Industry through the National Nuclear Safety and Safeguards Commission.

b) Packages and packagings for the transport of compressed or liquid gases or gases dissolved under pressure in Class 2; and

c) Packages and packagings whose net weight exceeds 400 kg or whose capacity exceeds 450 liters.

3.- REFERENCES.

To correctly implement this Standard, the following Official Mexican Standards must be consulted:

NOM-002-SCT2/1994	LISTING OF THE MOST COMMONLY TRANSPORTED HAZARDOUS SUBSTANCES AND MATERIALS.
NOM-024-SCT2/1994	SPECIFICATIONS FOR THE CONSTRUCTION AND RECONSTRUCTION, AS WELL AS THE TESTING METHODS FOR THE PACKAGES AND PACKAGINGS OF HAZARDOUS SUBSTANCES, MATERIALS AND WASTES.
NOM-CRP-001-ECOL/93	WHICH SETS FORTH THE CHARACTERISTICS OF THE HAZARDOUS WASTES, PROVIDES A LISTING OF SAID WASTES, AND ESTABLISHES THE LIMITS AT WHICH A WASTE BECOMES HAZARDOUS BY VIRTUE OF ITS ENVIRONMENTAL TOXICITY.

4.- DEFINITIONS.

PACKAGE.- Any receptacle or vessel in which the product is contained, for its distribution or sale.

PACKAGING.- Material which duly wraps, holds and protects duly products already in contained form, which material facilitates and withstands the storage and transport operations.

DRUM.- This is a cylindrical package and packaging with flat or convex ends, made of metal, fiberboard, plastic, plywood or other suitable material. This definition also includes packages and packagings of other shapes, for example round tapered-necked packages and packagings, or pail-shaped packages and packagings.

KEG.- This is a package or packaging made of metal or plastic, with a rectangular or polygonal cross-section.

WOODEN BARREL.- A package or packaging made of natural wood, with a round cross section, having convex walls consisting of staves and heads fitted with hoops.

BOXES.- These are packages and packagings with completely rectangular or polygonal faces, made of metal, wood, plywood, triply, reconstructed wood, fiberboard, plastic or other suitable material. Small holes are allowed for ease of handling or for opening and to meet their classification requirements so long as the integrity of the package during transport is not compromised.

RECEPTACLE.- This is a vessel intended to contain substances or objects, including any closing device.

BAGS.- These are flexible packages and packagings made of paper, plastic film, textile, woven material or other suitable materials.

CRATES.- This is an outer packaging having a framework shape with open spaces between its structural elements.

COMPOSITE PACKAGES AND PACKAGINGS.- These are packages and packagings consisting of an outer package and packaging and an inner receptacle, so constructed way that together they form an integral package and packaging. Once assembled, it remains an integral unit which is filled, stored, transported and emptied as such.

RECONDITIONED PACKAGE.- This includes [a] metal drum which:

A) Is cleaned to the original materials of construction, so as to eliminate the remains of any substance that was contained inside, any internal and external corrosion, and any external coatings and labels;

B) Is restored to its original shape and contour, with chimes (if any) straightened and sealed, and whose detachable gaskets have been replaced with new ones;

C) Were [sic] inspected after cleaning but before painted, and do not present any pitting, significant reduction in material thickness, metal fatigue, damaged threads or closures, or other major defects.

5. SPECIFICATIONS FOR THE MARKING OF PACKAGES AND PACKAGINGS.

5.1 Any package and packaging intended to be used for the transport of hazardous substances or wastes must display marks which are perfectly visible, indelible, legible and of a size in proportion to the package and packaging.

In addition, each package and packaging shall include the official transport designation (appropriate shipping name) of the hazardous substance or waste in question and the corresponding United Nations Organization identification number, preceded by the letters, "UN". In the case of Division 1.4 substances, compatibility group "S", the division and compatibility group letter shall also be indicated, unless they are marked with the "label 1.4S"; as a marking example:

N.E.O.M. Corrosive liquids (caprylyl chloride) UN 1760

For packages and packagings with a gross weight of over 30 kg, the marking or a duplicate of said marking must appear on the top part or on a side of the package and packaging.

Letters, numbers and symbols must be at least 12 mm high, except for packages and packagings of less than 30 liters capacity, in which case they must be at least 6 mm high, and for packages and packagings of 5 liters or 5 kg or less, [which] must be of an appropriate size.

The marking must indicate:

(A) The United Nations package and packaging symbol.

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This symbol must not be used except to certify that a certain package and packaging complies with the specifications of Official Mexican Standard NOM-024-SCT2/1994, "Specifications for the Construction and Reconstruction, as well as the Testing Methods for
Packages and Packagings of Hazardous Substances, Materials and Wastes," as well as with the provisions of the Regulation for the Land Transport of Hazardous Materials and Wastes.

Only those packages and packagings which have successfully passed the performance test criteria specified in Official Mexican Standard NOM-024-SCT2/1994 must be marked with the United Nations symbol. In the case of metal packages and packagings with [missing word,] the capital letters **"UN"** must be applied as symbol.

B) The code designating the type of package and packaging consists in:

- One arabic digit which indicates the type of package and packaging, for example (drum, keg, etc.), followed by

- One or several capital letters in latin characters which indicate the nature of the material, for example (steel, wood, etc.), followed, whenever necessary, by:

- One arabic digit which indicates the category of package and packaging within the type to which it belongs.

- In the case of composite packages and packagings, in the second place of the code, the code must show, in the second place, two capital letters in latin characters. The first one indicates the material of the inner receptacle, and the second one, the outer package and packaging.

- In the case of combined packages and packagings, only the number of the class corresponding to the outer package and packaging may be used.

- The designation of the numbers and letters referred to in the previous paragraphs shall be as indicated in Table 1.

C) A code consisting in two parts:

I) A letter which indicates that the package and packaging group or groups for which the design type in question have passed the tests:

X, For package and packaging groups I, II, and III;

Y, For package and packaging groups II and III;

Z, For package and packaging groups III only.

II) In the case of packages and packagings without any inner packaging and package and which are intended for the transport of liquids, the relative density, rounded off to the first decimal (this indication may be omitted if the relative density does not exceed 1.2); in the case of packages and packagings intended for the transport of solid substances or inner packages and packagings, the maximum gross weight must be indicated in kilograms.

D) The letter "S", which indicates that the package and packaging is intended for the transport of solid substances or inner packages and packagings and that it has passed a hydrostatic pressure test, that is, the test pressure in kilo pascal (k Pa), rounded off to the decimal.

E) In addition, the last two digits of the year of manufacture of the package and packaging must be included. Types which assigned a "1H" and "3H" code must also display the month of manufacture; this may be marked in a different place from the remainder of the marks. To this end, the appropriate method is:

F) The distinctive sign of the manufacturing country[;] in the case of packages and packagings manufactured in Mexico, the abbreviation "MEX" must be displayed.

G) The package and packaging must also have the name or other mark which identifies the manufacturer or the laboratory which certifies that the packages and packagings

meet the specifications for the construction and reconstruction and the testing methods for packages and packagings of hazardous substances, materials and wastes, as indicated in Mexican Official Standard NOM 024-SCT2/1994.

5.2 In the case of packages and packagings such as metal barrels with a capacity greater than 100 liters, these permanent marks may replace the permanent marks mentioned in Section 5.1.

5.2.1 In addition to the various marks indicated in Section 5.1, each new metal barrel [sic] of a capacity greater than 100 liters must display the marks described in Section 5.1 A) through E) on the bottom, with an indication of the nominal thickness of at least the metal used in the body (in mm, to 0.1 mm), in permanent form (for example, embossed). When the nominal thickness of the head of a metal barrel [sic] is thinner than the bottom,[sic] the nominal thickness of the top part of the head, body and bottom must be marked on the bottom in permanent form.

5.2.2 For barrels made [sic] of metal, if there is no change in the type of package and packaging and without replacement or removal of the integrated structural components, the required markings need not be permanent on the heads or sides.

The reconditioned metal barrels must display the markings specified in Section 5.1 A) through E) in permanent form on the top part of the head or on the side.

5.2.3 Metal barrels made of materials (for example, stainless steel) designed to be reconditioned repeatedly may display the markings indicated in Section 5.1 F) and G) in permanent form.

5.3 Any reusable package and packaging likely to be subjected to a reconditioning process which might erase the marks must display the marks indicated in paragraphs A) through E) of section 5.1, in the order indicated, in permanent form (embossed or inlaid), so as to withstand the reconditioning process.

5.4 In the case of reconditioned packages and packagings, additional marks must be included in accordance with the following indications:

H) The distinctive sign of the country in which the reconditioning was done.

I) The name and authorized symbol of the reconditioner.

J) The year of the reconditioning, the letter "R" which means reconditioned, and the letter "L" in case the packages and packagings have passed the leakproofness test referred to in Official Mexican Standard NOM-024-SCT2, "Specifications for the Construction and Reconstruction, as well as Methods for Testing the Packages and Packagings of Hazardous Substances and Wastes".

These marks must be placed next to the one referred to in Section 5.1, and it [sic] may replace the mark indicated in paragraphs F) and G).

5.5 Whenever, after reconditioning, the markings required in Section 5.1 A) through D) do not appear on the top part or on the side of a metal barrel, the reconditioner must apply the

indications provided in Section 5.1 H), I) and J). These markings must not identify a greater capacity presentation for which the type of original design has been tested and marked.

Below is an example of marks of new and reconditioned packages and packagings.

N E W
PACKAGE AND PACKAGING
4G/Y145/S/83
MEX/VL 824

CHARACTERISTIC	NUMBER OR LETTER	MAY BE FOUND IN
Box	4	Table 1
Fiberboard box	G	Table 1
Package and Packaging Group II and III	Y	Paragraph C (I)
Gross weight [of] material	145	Paragraph C (II)
Solid material	S	Paragraph D
Year of manufacture	83	Paragraph E
Country of manufacture	Mex	Paragraph F
Manufacturer's brand	VL 824	Paragraph G

RECONDITIONED
PACKAGE AND PACKAGING
1A1/Y 1.4/150/83
MEX/VL 824 RL

CHARACTERISTIC	NUMBER OR LETTER	MAY BE FOUND IN
Drum	1	Table 1
Steel	A	Table 1
Non-removable head	1	Table 1
Package and packaging Group II, III	Y	Section (i)
Relative density	1.4	Paragraph C (II)
Hydrostatic test pressure	150	Paragraph D
Year of manufacture	83	Paragraph E
Manufacturer's brand	VL 824	
Reconditioned	R	Paragraph I
Leakproofness test	L	Paragraph I

The following figures indicate the type of packages and packaging:

1. Drum
2. Barrel
3. Keg
4. Box
5. Bag
6. Composite package and packaging
7. Pressure vessel

The following capital letters indicate the types of material:

A. Steel (of all types and with all the surface treatments)
B. Aluminum
C. Natural wood
D. Plywood
F. Reconstructed wood
G. Fiberboard
H. Plastic
L. Textile
M. Multi-ply paper
N. Metal (except steel and aluminum)
P. Glass, porcelain or stoneware

TABLE 1
CODES ASSIGNED TO THE VARIOUS TYPES OF PACKAGE AND PACKAGING

TYPE OF CONT. & PACK.	MATERIAL	CATEGORY	DESIGNATING CODE
1. Drums	A. Steel	1. Non-removable head	1A1
		2. Removable head	1A2
	B. Aluminum	1. Non-removable head	1B1
		2. Removable head	1B2
	D. Plywood		1D
	G. Fiberboard		1G

	H. Plastic	1. Non-removable head	1H1
		2. Removable head	1H2
2. Barrels	C. Wooden	1. Bung	2C1
		2. Removable head	2C2
3. Kegs	A. Steel	1. Non-removable head	3A1
		2. Removable head	3A2
	H. Plastic	1. Non-removable head	3H1
		2. Removable head	3H2
4. Boxes	A. Steel		4A
	B. Aluminum		4B
	C. Natural Wood	1. Ordinary	4C1
		2. Non-sifting walls	4C2
	D. Plywood		4D
	F. Reconstructed Wood		4F
	G. Fiberboard		4G
	H. Plastic	1. Expanded	4H1
		2. Rigid	4H2

5. Bags	H. Plastic	1. Without inner liner or coating	5H1
		2. Non-sifting	5L2
		3. Water-resistant	5L3
	M. Paper	1. Multi-ply	5M1
		2. Multi-ply, water-resistant	5M2
6. Composite packckages packagings	H. Plastic receptacle	1. With outer steel drum	6HA1
		2. With outer steel crate	6HA2
		1. With outer aluminum drum	6HB1
		2. With outer aluminum crate	6HB2
		With outer wooden crate	6HC
		1. With outer plywood drum	6HD1
		2. With outer plywood crate	6HD2
		1. With outer fiberboard drum	6HG1
		2. With outer fiberboard crate	6HG2
		1. With outer plastic drum	6HH1
		2. With outer rigid plastic crate	6HH2

P. Glass, porcelain or stone-ware receptacle	1. With outer steel drum	6PA1
	2. With outer steel crate	6PA2
	1. With outer aluminum drum	6PB1
	2. With outer aluminum crate	6PB2
	With outer wooden crate	6PC
	1. With outer plywood jerrican	6PD1
	2. With outer wickerwork hamper	6PD2
	1. With outer fiberboard drum	6PG1
	2. With outer fiberboard crate	6PG2
	1. With outer expanded plastic package and packaging	6PH1
	With outer rigid plastic package and packaging	6PH2